

REMARKS

In the Amendment, claims 1 and 23 are amended. Claims 1-30 are pending, with claims 13-22 and 24 being withdrawn as directed to a non-elected species. Reconsideration of this application, as amended, is requested.

Species Election

Claims 13-22 and 24 are withdrawn for being directed to a non-elected species.

The elected species has claims directed to the carrier being synthetic plastic. The non-elected species has claims directed to the carrier being polycarbonate. As acknowledged by the Examiner, polycarbonate is a synthetic plastic. (Office Action dated February 16, 2006, paragraph 3; Office Action dated August 29, 2005, paragraph 2; Office Action dated April 15, 2005, paragraph 2.). Thus, claims 1 and 23, which recite that the carrier is synthetic plastic, are generic to claims 13-22 and 24; this was acknowledged in the Office Action dated December 16, 2004.

Currently, there is no allowable generic or linking claim. However, upon allowance of a generic or linking claim, Applicant is entitled to consideration of the non-elected claims. Applicants contend that in view of the amendments and remarks herein, the generic claims are allowable.

102 Rejections

Claims 1 and 2 are rejected under 35 U.S.C. 102(e) as anticipated by Gurusamy et al., U.S. Patent No. 6,361,423. Applicants disagree.

Applicant has amended claim 1 to more clearly define the invention, that of a conditioning disk having a substrate, a plurality of abrasive particles affixed with a matrix material, and a synthetic plastic or ceramic carrier. Support for this is found throughout the specification and figures. The carrier, as acknowledged by the Office Action, is affixed or mounted to the substrate by any of various mechanisms. This conditioning disk is a stand alone, discrete item; see, for example, FIG. 3 of the pending application. The carrier is an integral part, with the substrate, of the disk.

The '423 patent, conversely, teaches conditioning disk 82 that can be formed of nickel-coated carbon steel having the lower surface 84 embedded with abrasive particles. See column 11, lines 40-42, and FIG. 9 of the '423 patent. The '423 patent does not teach or suggest a conditioning disk having a substrate, a plurality of abrasive particles affixed with a matrix material, and a synthetic plastic carrier. Rather, the '423 patent teaches a conditioning disk (having abrasive particles embedded therein) that is removably engageable with a disk holder 158. The '423 patent does not teach a matrix material affixing the abrasive particle to the substrate, and the '423 patent does not teach of carrier affixed to the substrate.

What the '423 patent does teach is a disk holder 158, made of synthetic plastic, that is configured to receive therein and hold disk 82. Reproduced below are FIGS. 7A and FIG. 9 from the '423 patent, which show the disk holder 158 and the conditioning disk 82, respectively. As is readily seen, disk 82 is a separate item from disk holder 158.

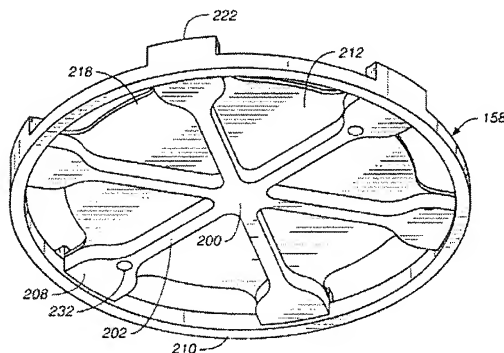


FIG. 7A

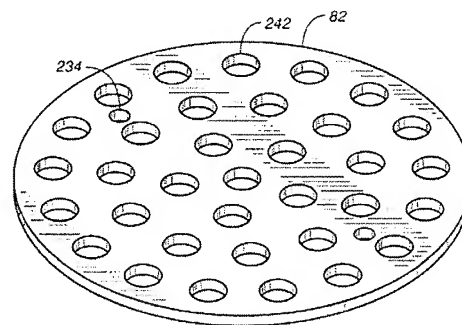


FIG. 9

Disk holder 158 has a central core or hub 200 from which radiate spokes 202, which have a lower surface 206. The holder 158 includes an outer rim 210 which has a projection 222 at the outer end of each spoke 202. (Column 10, line 54 through column 11, line 20).

Conditioning disk 82 has a lower surface 84 (not shown in FIG. 9) embedded with abrasive particles and has an upper surface 238 (also not shown in FIG. 9). Disk 82 includes holes 242 and bores 234 therethrough. Again, as is readily seen, disk 82 is a separate item from disk holder 158.

FIG. 4 of the '423 patent, reproduced below, shows how disk 82 fits into and is held by disk holder 158. Lower surface 84 and upper surface 238 of disk 82 are seen in FIG. 4. Disk 82 seats against lower surface 206 of ribs 202 within projections 222.

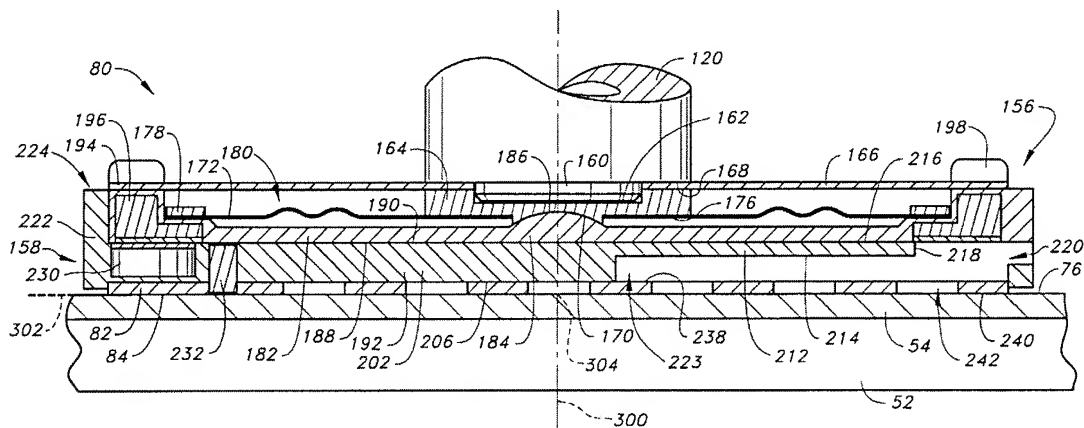


FIG. 4

Disk 82 is removable and replaceable within holder 158, which is acknowledged in the Office Action of August 29, 2005 that discusses that magnetic attachment between the disk 82 and holder 182 is used.

As can be readily understood, the holder 158 is not part of conditioning disk 82, and conditioning disk 82 of the '423 patent does not have a substrate, a plurality of abrasive particles affixed with a matrix material, and a synthetic plastic or ceramic carrier.

Applicant does not understand the comment on page 4 of the February 16, 2006 Office Action, which states "that the features upon which application relies (i.e., the specific structure of the carrier) is not recited in the rejected claim(s)." Applicant argues that the '423 patent does not teach a synthetic plastic or ceramic carrier that is part of the conditioning disk; this specific structure of the carrier is recited in the claims.

Applicant contends that the '423 patent does not anticipate claim 1. Similarly, the '423 patent does not anticipate claim 2 which depends from claim 1. Withdrawal of the rejection is requested.

103 Rejections

Claims 1-12, 23 and 25-30 were rejected under 35 U.S.C. 103(a) as being unpatentable over Sung, U.S. Patent No. 6,679,243 in view of Gurusamy et al., the '423 patent. Applicant disagrees.

Applicant has amended claim 1 to more clearly define the invention, that of a conditioning disk having a substrate, a plurality of abrasive particles affixed with a matrix material, and a synthetic plastic or ceramic carrier, and amended claim 23 to more clearly define the invention, that of a conditioning disk having a substrate, a plurality of abrasive particles affixed with electroplated metal, and a synthetic plastic or ceramic carrier. Support for these amendments is found throughout the specification and figures. The conditioning disk, of each of claim 1 and claim 23, is a stand alone, discrete item; see, for example, FIG. 3 of the pending application. The carrier is an integral part, with the substrate, of the disk.

The Sung patent teaches a disk having a substrate with abrasive particles thereon. In Example 18, the substrate is adhered to a stainless steel carrier. There is no teaching or suggestion of having a synthetic plastic or ceramic carrier being part of the disk.

The '423 patent has been discussed above, and those comments also apply here. The '423 does not teach or suggest a synthetic plastic or ceramic carrier that is part of the conditioning disk, as is required by the pending claims.

Applicant contends that neither Sung, the '423 patent, nor the combination thereof, teaches or suggests a conditioning disk as recited by the pending claims, which includes a synthetic plastic or ceramic carrier as part of the conditioning disk. Accordingly, claims 1 and 23 are unobvious over Sung, the '423 patent, and the combination, as are claims 2-12, 25-30 which depend therefrom. Withdrawal of the rejection is requested.

Serial No. 10/800,516
Amendment dated June 16, 2006
Reply to Office Action of Feb. 16, 2006

Summary

In view of the above amendments and remarks, Applicant respectfully requests a Notice of Allowance. If the Examiner believes a telephone conference would advance the prosecution of this application, the Examiner is invited to telephone Applicant's attorney Dan Biesterveld, Reg. No. 45,898, at 651.737.3193.

Respectfully submitted,

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